

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This Environmental Impact Statement (EIS) analyzes the potential environmental consequences that may result from the United States (U.S.) Navy's proposed action and alternatives. The proposed action is an increase in the tempo of military test and evaluation (T&E) and operational training activities conducted at Naval Air Weapons Station (NAWS) China Lake. The minor land use changes that would result from a decision to accommodate an increase in military operations would be reflected in the NAWS China Lake Comprehensive Land Use Management Plan (CLUMP). Under the terms of the California Desert Protection Act (CDPA) of 1994 (16 U.S.C. § 410aaa et seq.), the CLUMP is the strategic planning vehicle through which NAWS manages land use and environmental resources. The CLUMP reflects the integration of range management strategies, the installation's Integrated Natural Resources Management Plan (INRMP), which is required under the Sikes Act as amended in 1997 (16 U.S.C. § 670a et seq.), and other management tools such as the Integrated Cultural Resources Management Plan (ICRMP).

This EIS has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [U.S.C.] § 4321 et seq.), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (Title 40 Code of Federal Regulations [C.F.R.] §§ 1500-1508), and Department of the Navy Procedures for Implementing NEPA (32 C.F.R. § 775). This EIS satisfies the requirements of NEPA and will be filed with the U.S. Environmental Protection Agency (USEPA) and distributed to appropriate federal, state, local, and private agencies, organizations, and individuals for review and comment.

NAWS China Lake is located in the Western Mojave Desert of southern California, approximately 150 miles (241 kilometers) northeast of Los Angeles (Figure ES-1). The Station, composed of the North Range and the South Range, encompasses approximately 1,700 square miles (4,403 square kilometers) and is located in portions of Inyo, Kern, and San Bernardino counties. The NAWS land ranges, operated by the Department of the Navy for more than 50 years, provide a safe, secure, and highly instrumented volume of land and airspace in which to conduct controlled tests and operationally realistic training.

ES.2 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

The purpose of the proposed action is to accommodate an increase in current test and training operations at NAWS and to achieve compliance with the CDPA and the Sikes Act as amended. The established mission of NAWS is to conduct state-of-the-art weapons T&E and operational training within a safe, secure, and operationally diverse land range test environment. The need for the proposed action and subsequent development of the CLUMP, INRMP, and associated EIS have been driven by the following factors: 1) changes to the type, tempo, and location of military test and training operations that support the military readiness mission in response to changing world events, Department of Defense (DoD)/Navy fiscal directives, and NAWS business development initiatives, and 2) passage of new laws and regulations affecting land use and environmental resources management.

ES.3 PUBLIC INVOLVEMENT

The public notification process for the CLUMP and EIS was designed to reach all interested parties; community organizations; federal, state, and local agencies; and Native American tribes. The public scoping process was conducted from April 1 to June 30, 1997, and included direct mailings and publication of the Notice of Intent to prepare an EIS in the Federal Register (April 1, 1997) and in local newspapers. Six public scoping meetings were held in the vicinity of NAWS.

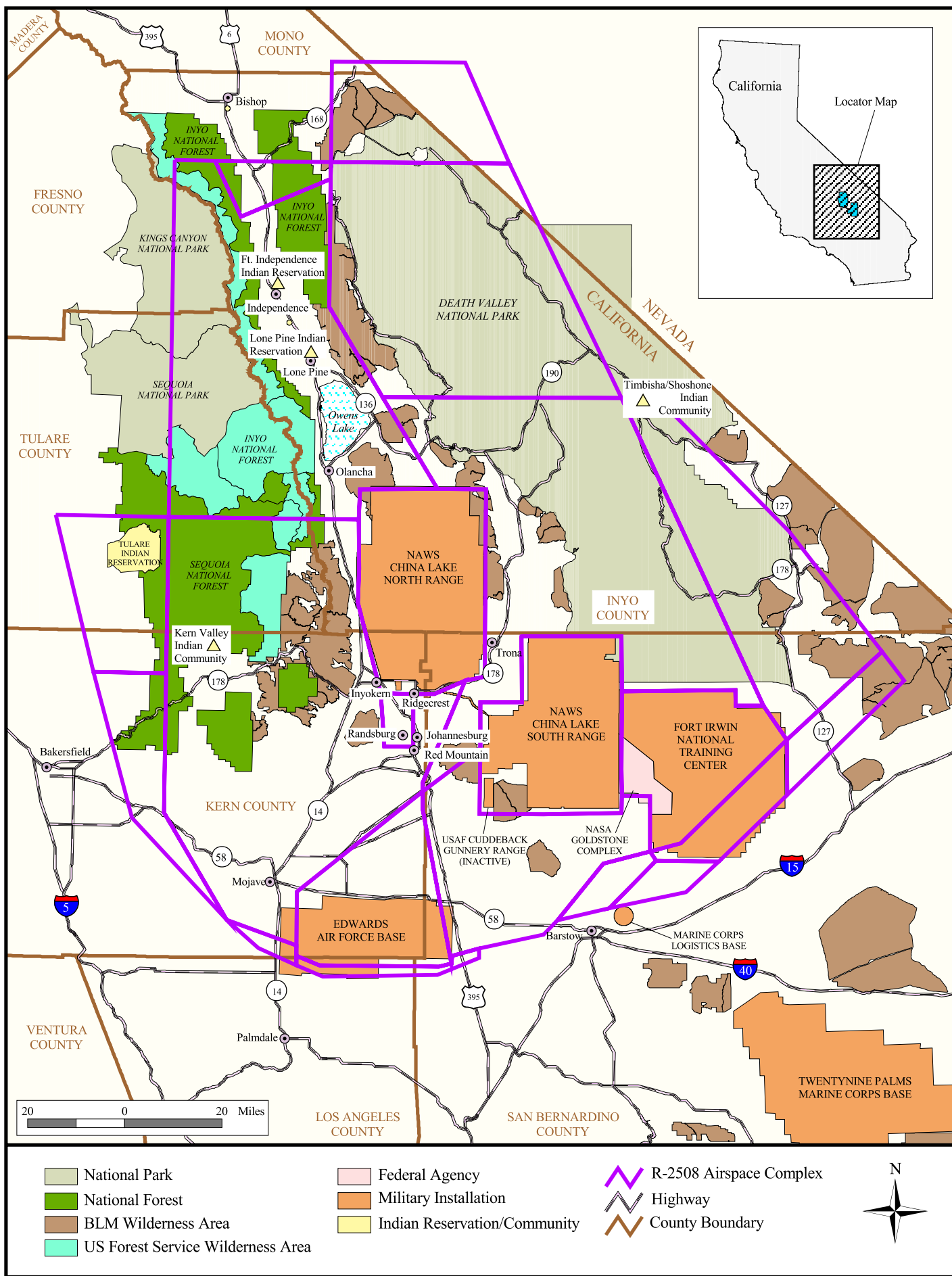


Figure ES-1 NAWS China Lake and Vicinity

During the EIS scoping process, approximately 40 written comments were received from individuals; interested groups; federal, state, and local agencies; and Native American tribes. The Navy considered all comments received during the scoping process when determining the issues to be evaluated in this EIS. A summary of the scoping comments and relevant scoping materials are included in Appendix A (Volume II) of this EIS.

The DEIS was available for public review and comment from November 22, 2002 to February 21, 2003 (90 days). Public hearings were conducted during the review period in Ridgecrest, Inyokern, Barstow, Independence, and Trona. Public comments received were reviewed and appropriately incorporated in this FEIS. Responses to all public comments are presented in Chapter 12 of this document. The Final EIS will be available for a 30-day review period prior to publication of the Navy's Record of Decision (ROD). The ROD will be published in the Federal Register.

ES.4 DESCRIPTION OF THE PROPOSED ACTION

The proposed action includes a moderate expansion of military operations, continuation of current nonmilitary activities, and implementation of the CLUMP and INRMP.

ES.4.1 Military Operations

Proposed changes to military operations include increases in the type and tempo of ongoing military T&E, training, and support operations. Increases in military operations would be phased over 5 years (according to operational needs) and include expansion of range flight operations (both subsonic and supersonic operations), airfield flight operations, and range ground operations (target and test site use and ground troop training [GTT] type, tempo, and location). Specific operational increases are outlined in the "Moderate Expansion Alternative" column of Table ES-1.

ES.4.2 Nonmilitary Uses

Nonmilitary uses requiring access to NAWS-administered lands would continue to be accommodated at NAWS. Public access would continue to be limited to specific areas on a case-by-case basis due to established safety and security requirements. Limited public access to designated areas would continue to be permitted according to the terms and conditions granted by the NAWS Commanding Officer. The Navy would continue to accommodate nonmilitary uses to the extent that these activities are compatible with military operations; do not create a safety, security, fiscal, or regulatory risk; and do not adversely impact the Station's natural and cultural resources. Nonmilitary land uses that would continue under the proposed action are summarized at the bottom of Table ES-1.

ES.4.3 CLUMP and INRMP Implementation

Since NAWS is required by law to have a CLUMP and INRMP in place for any level of range operations, the proposed action includes implementation of the CLUMP and INRMP reflecting minor changes in land use projected for accommodating moderate increases in military operations. The CLUMP is a long-term, strategic plan that formalizes corporate process for land use planning and management at NAWS. This plan provides an integrated framework for the management of military operations, public health and safety practices, and environmental resource conservation programs. As the strategic planning vehicle for NAWS, the CLUMP incorporates implementation of the Station's INRMP. The INRMP establishes the goals and management guidelines to conserve and protect the Station's natural resources in accordance with Sikes Act amendments, and other applicable directives in a manner that is consistent with the Station's operations.

Table ES-1 Comparison of Alternatives

Activity	Military Uses		
	No Action Alternative	Limited Expansion Alternative	Moderate Expansion Alternative
Range Flight Operations	Continue current level of test and training operations at approximately 4,600 flight hours per year.	Subsonic operations would increase by 15% over 5 years. Use would increase by 690 additional flight hours to a total of 5,290 annual flight hours.	Subsonic operations would increase by 25% over 5 years. Use would increase by 1,150 additional flight hours to a total of 5,750 annual flight hours.
	Continue current level of supersonic operations at an average of three per month (36 per year).	Supersonic operations would increase by approximately 2 per week, or up to a total of 100 events per year.	Supersonic operations would increase by approximately 2 per week, or up to a total of 100 events per year.
Airfield Flight Operations	Continue current level of operations at approximately 27,000 annual flight operations.	Operations would increase by 15% over 5 years. Use would increase by 4,050 additional flight operations to a total of 31,050 annual operations.	Operations would increase by 25% over 5 years. Use would increase by 6,750 additional flight operations to a total of 33,750 annual operations.
Range Ground Operations			
Target and Test Sites	Continue current use of existing authorized target and test sites on the North and South ranges, which include those at Airport Lake, Baker, Charlie, George, and Coso ranges (North Range), and at Charlie Airfield and Randsburg Wash Gunline (South Range). Total acreage of target and test sites currently used is 7,000 acres (2,833 hectares). Tempo of target and test site use would remain at approximately 4,600 hours annually.	<p>Continue current operations, plus</p> <ol style="list-style-type: none"> 1) Increase tempo of target and test sites and associated ordnance use by approximately 15% over 5 years. Use would increase 690 hours to a total of 5,290 hours annually. 2) Resume use of all previously disturbed but currently underutilized target and test sites range-wide (approximately 2,140 acres [866 hectares]), for a total target and test site acreage of 9,140 acres (3,699 hectares). 3) Re-introduce the use of high explosives (HE) at Wingate Airfield in Mojave B North (South Range) for the delivery of precision-guided munitions (for limited use [2-3 times per year]). 	<p>Continue current operations, plus</p> <ol style="list-style-type: none"> 1) Increase tempo of target and test sites and associated ordnance use by approximately 25% over 5 years. Use would increase 1,150 hours to a total of 5,750 hours annually. 2) Resume use of all previously disturbed but currently underutilized target and test sites range-wide (approximately 2,140 acres [866 hectares]), for a total target and test site acreage of 9,140 acres (3,699 hectares). 3) Re-introduce the use of HE at Wingate Airfield in Mojave B North (South Range) and at the Bullseye Target in Superior Valley (South Range) for the delivery of precision-guided munitions (for limited use [2-3 times per year]).

Military Uses			
Activity	No Action Alternative	Limited Expansion Alternative	Moderate Expansion Alternative
Range Ground Operations (cont.)			
Ground Troop Training	Continue current patterns of GTT at existing areas of operations. Types 1 ^a and 2 ^b would remain at current levels.	Continue current operations, plus increase the tempo of Type 1 and 2 operations in established areas over 5 years.	Continue current operations, plus increase the tempo of Type 1 and 2 operations in established areas over 5 years, establish a Type 1 operation area in the Coso Target Range, and introduce Type 3 ^c training at Airport Lake.
	North Range: 1,650 use-days on 33,900 acres (13,719 hectares).	North Range: Increase use by 1,650 use-days for a total of 3,300 use-days on 33,900 acres (13,719 hectares).	North Range: Increase use by 3,150 use-days at Airport Lake and Coso Target Range for a total of 4,800 use-days and add 24,748 acres (10,015 hectares) for a total use area of 58,648 acres (23,734 hectares).
	South Range: 2,300 use-days on 287,515 acres (116,354 hectares).	South Range: Increase use by 2,300 use-days for a total of 4,600 use-days on 287,515 acres (116,354 hectares).	South Range: Increase use by 2,300 use-days for a total of 4,600 use-days on 287,515 acres (116,354 hectares).
	Total Use-Days: 3,950 Total Acres/Hectares: 321,415/130,073	Total Use-Days: 7,900 Total Acres/Hectares: 321,415/130,073	Total Use-Days: 9,400 Total Acres/Hectares: 346,163/140,088
^a Type 1: Small-scale; light infantry only, no vehicles.			
^b Type 2: Medium-scale; infantry with wheeled vehicles only (e.g., trucks).			
^c Type 3: Large-scale; infantry with wheeled and tracked vehicles (e.g., tanks).			
Nonmilitary Uses			
Activity	No Action, Limited Expansion, and Moderate Expansion Alternatives		
Native American Uses	Continue access to Coso Hot Springs and Prayer Site per Memorandum of Agreement. Consider other access on a case-by-case basis.		
Research and Education	Continue ongoing projects and consider others on a case-by-case basis.		
Recreation			
Camping	Allow camping at Birchum Springs on a case-by-case basis.		
Golf and Gym	Keep golf course and gymnasium open to the public.		
Hiking	Consider on-Station hikes on a case-by-case basis.		
Equestrian	Accommodate access at a specified area on G-Range Approach Corridor on a case-by-case basis.		
Off-Road Vehicle	Permit off-road vehicle use of Randsburg Wash Access Road during public events sponsored by the Bureau of Land Management.		
Petroglyph Tours	Allow petroglyph tours as described in the NAWS Public Access Policy.		
Bird Watching	Allow Audubon Society annual bird counts.		
Photography	Allow photography on a case-by-case basis.		

Use-Day = one person for one 8-hour day

ES.5 ALTERNATIVES ANALYSIS

Guidance for the development of alternatives is provided in CEQ regulations (40 C.F.R. § 1502.14) and Navy Procedures described in 32 C.F.R. § 775. The analysis of alternatives is the heart of an EIS and is intended to provide the decision-maker and the public with a clear understanding of relevant issues and the basis for choice among identified options. NEPA requires that an EIS be prepared to evaluate the environmental consequences of a range of reasonable alternatives.

Consistent with the purpose and need identified in Chapter 1, selection criteria were developed to help identify viable alternatives and eliminate unreasonable alternatives from further consideration. Selection criteria for this EIS include the following: 1) reasonable alternatives must fulfill the need for, and purpose of, the proposed action and 2) alternatives must be consistent with the goals, policies, and management strategy defined in the CLUMP (Appendix H, Vol. III).

The selection criteria described above were used to develop the three alternatives analyzed in this EIS. The No Action Alternative maintains the Navy's current level of operations. The Limited Expansion and Moderate Expansion alternatives propose increases in the type, tempo, and location of military T&E and training operations (approximately 15 percent for the Limited Expansion Alternative and 25 percent for the Moderate Expansion Alternative). The CLUMP and INRMP would be implemented under all alternatives since these plans are required by law. Table ES-1 compares the specific elements of each alternative and Table ES-2 provides a summary of impacts and mitigation measures, by resource area, for each of the alternatives analyzed.

ES.6 CUMULATIVE IMPACTS

Both on-station and off-station past, present, and reasonably foreseeable projects were identified part of the cumulative impact analysis. Of the projects reviewed, the proposed expansion of Fort Irwin NTC has the greatest potential for cumulative impacts in combination with implementation of the proposed action. Potential impacts to air quality, biological resources, and cultural resources may be significant; however, the scope of the proposed Fort Irwin expansion project is still being developed and potential cumulative impacts cannot be quantitatively evaluated. As the proposed action for the land expansion is finalized, an EIS will be prepared that will address the potential for adverse effects. The West Mojave Coordinated Management Plan and the Northern and Eastern Mojave Planning Efforts are intended to improve environmental resources management and are expected to have beneficial cumulative impacts. Potential cumulative impacts resulting from other relevant projects combined with the proposed activities addressed in this EIS were determined to be less than significant.

ES.7 OTHER REQUIRED CONSIDERATIONS

ES.7.1 Possible Conflicts Between Actions and Objectives of Federal, State, and Local Land Use Plans, Policies, and Controls

The proposed action would comply with existing federal regulations and be compatible with state, regional, and local policies and programs. The proposed action would be in compliance with all applicable federal acts, executive orders, and policies.

ES.7.2 Irreversible or Irretrievable Commitment of Resources

The proposed action would constitute an irreversible and irretrievable commitment of nonrenewable or depletable resources for the materials and energy expended during the conduct of military test and training activities. Implementation of the proposed action would result in a positive benefit of improved environmental resources management processes. The limited consumption of environmental resources resulting from the proposed action would not limit future potential land or environment resource use.

Table ES-2
Summary of Environmental Impacts

Resource	No Action Alternative	Limited Expansion Alternative	Moderate Expansion Alternative
Land Use	No changes to existing land uses would occur. Impacts would remain less than significant.	No changes to existing land uses would occur. Reuse of target and test sites on ranges would be compatible with established use. Reintroduction of HE ordnance at Wingate Airfield would be compatible with established uses. Impacts would be less than significant.	No changes to existing land uses would occur. Reuse of target and test sites on ranges would be compatible with established use. Reintroduction of HE ordnance at Wingate Airfield and Bullseye Target and establishing GTT operations in Coso Target Range and Airport Lake would be compatible with established use. Impacts would be less than significant.
Noise	Flight operations at Armitage Airfield would continue to expose off-station areas to community noise equivalent level (CNEL) values up to 65 decibels (dB). These noise levels are consistent with established guidelines for land use zones that surround the Station. Noise levels for range flight operations are below 65 dB. CNEL noise contours for ordnance use remain on-station. Impacts would remain less than significant.	Increased flight operations at Armitage Airfield would expose off-station areas to noise levels up to 65 to 70 dB CNEL. These noise levels are consistent with established guidelines for land use zones that surround the Station. Noise levels for increased range flight operations would be below 65 dB. CNEL noise contours for increased ordnance use would remain on-station. Impacts would be less than significant.	Increased flight operations at Armitage Airfield would expose off-station areas to noise levels up to 65 to 70 dB CNEL. These noise levels are consistent with established guidelines for land use zones that surround the Station, with the exception of a 3-acre (1.2-hectare) area currently zoned for residential use (Federal Interagency Committee on Noise guidelines consider 70 dB to be “normally unacceptable” for residential use). This is considered an adverse but less than significant impact. Noise levels for increased range flight operations would be below 65 dB. CNEL noise contours for increased ordnance use would remain on-station. Impacts would be less than significant.
Air Quality	Continued operations would create no increases in current emissions. Impacts would remain less than significant.	Net emissions changes would be below de minimis levels; a General Conformity Determination is not required. Net emissions changes would not significantly affect regional air quality. Impacts would be less than significant.	Net emissions changes would be below de minimis levels; a General Conformity Determination is not required. Net emissions changes would not significantly affect regional air quality. Impacts would be less than significant.
Biological Resources	Current operations have less than significant impacts on threatened and endangered species and species/habitats warranting NAWS stewardship. Ongoing implementation of the NAWS Desert Tortoise Habitat Management Plan (DTHMP) minimizes the potential for	Proposed operations would have less than significant impacts on threatened and endangered species and species/habitats warranting NAWS stewardship. Proposed operations are not expected to result in adverse impacts to designated critical habitat or to the goals and	Proposed operations would have less than significant impacts on threatened and endangered species and species/habitats warranting NAWS stewardship. Proposed operations are not expected to result in adverse impacts to designated critical habitat or to the goals and

Resource	No Action Alternative	Limited Expansion Alternative	Moderate Expansion Alternative
Biological Resources (cont.)	current range operations to impact tortoises or tortoise habitat. Compliance with the terms of the 1995 Biological Opinion for the DTHMP ensures that impacts are less than significant. Ongoing implementation of the Station's fire management policy in the Superior Valley further reduces the potential for impacts to the desert tortoise. Continued implementation of the wild horse and burro management program reduces impacts to riparian areas. Impacts would remain less than significant.	objectives of the Station's DTHMP. As discussed for the No Action Alternative, potential impacts to desert tortoise would remain below a level of significance through continued compliance with the terms of the 1995 Biological Opinion. Ongoing implementation of the Station's fire management policy in the Superior Valley would further reduce the potential for impacts to the desert tortoise. Impacts would be less than significant.	objectives of the Station's DTHMP. As discussed for the No Action Alternative, potential impacts to desert tortoise would remain below a level of significance through continued compliance with the terms of the 1995 Biological Opinion. Ongoing implementation of the Station's fire management policy in the Superior Valley would further reduce the potential for impacts to the desert tortoise. Impacts would be less than significant.
Cultural Resources	Current operations have less than significant impacts on cultural resources. Historic preservation procedures for managing cultural resources continue to be implemented at NAWS. The Station has prepared a draft base-wide Programmatic Agreement (PA) between NAWS, the State Historic Preservation Office, and the Advisory Council on Historic Places. NAWS Section 106 compliance efforts will continue to be implemented in accordance with 36 C.F.R. 800 requirements and procedures defined in the PA for implementation of the CLUMP and the ICRMP. Continued application of routine impact avoidance procedures also minimizes the potential for impacts on cultural resources. Impacts would remain less than significant.	As discussed for the No Action Alternative, NAWS Section 106 compliance efforts would continue to be implemented in accordance with 36 C.F.R. 800 requirements and procedures defined in the PA for implementation of the CLUMP and the ICRMP. This procedure would ensure that impacts to cultural resources would be less than significant.	As discussed for the No Action Alternative, NAWS Section 106 compliance efforts would continue to be implemented in accordance with 36 C.F.R. 800 requirements and procedures defined in the PA for implementation of the CLUMP and the ICRMP. This procedure would ensure that impacts to cultural resources would be less than significant.

Resource	No Action Alternative	Limited Expansion Alternative	Moderate Expansion Alternative
Geology and Soils	Ongoing mission support for military test and training activities, and non-military uses, are conducted in established operating areas and roadways. Minor wind erosion occurs at disturbed areas but is localized. Impacts would remain less than significant.	Operations proposed under the Limited Expansion Alternative would not significantly impact geology and soils at NAWS.	Operations proposed under the Moderate Expansion Alternative would not significantly impact geology and soils at NAWS.
Water Resources	Current operations do not significantly impact the quality or supply of surface and groundwater resources at NAWS.	Operations proposed under the Limited Expansion Alternative would not significantly impact the quality or supply of surface and groundwater resources at NAWS.	Operations proposed under the Moderate Expansion Alternative would not significantly impact the quality or supply of surface and groundwater resources at NAWS.
Socioeconomics	Current military test and training operations at NAWS do not adversely affect economic activities in the ROI. Minority or low income populations are not disproportionately affected. Impacts would remain less than significant.	Implementation of the Limited Expansion Alternative would not adversely affect economic activities in the ROI. Minority or low income populations would not be disproportionately affected. Impacts would be less than significant.	Implementation of the Moderate Expansion Alternative would not adversely affect economic activities in the ROI. Minority or low income populations would not be disproportionately affected. Impacts would be less than significant.
Utilities and Public Services	Current military test and training operations at NAWS do not exceed the Station's utility system capabilities or the public utilities service capacity. Impacts would remain less than significant.	Operations proposed under the Limited Expansion Alternative would not exceed the Station's utility system capabilities or the public utilities service capacity. Impacts would be less than significant.	Operations proposed under the Moderate Expansion Alternative would not exceed the Station's utility system capabilities or the public utilities service capacity. Impacts would be less than significant.
Public Health and Safety	Current military test and training operations at NAWS are conducted in accordance with established health and safety procedures. Children would not be exposed to disproportionate safety risks. Impacts would remain less than significant.	Implementation of the Limited Expansion Alternative would be conducted in accordance with established health and safety procedures. Children would not be exposed to disproportionate safety risks. Impacts would be less than significant.	Implementation of the Moderate Expansion Alternative would be conducted in accordance with established health and safety procedures. Children would not be exposed to disproportionate safety risks. Impacts would be less than significant.
Hazardous Materials and Wastes	Current military test and training operations generate 57 tons (52 metric tons) of Resource Conservation and Recovery Act (RCRA) wastes and approximately 300 tons (272 metric tons) of non-RCRA wastes annually; these amounts do not exceed the Station's processing capabilities or permit conditions. Impacts would remain less than significant.	Implementation of the Limited Expansion Alternative would generate approximately 15% more RCRA and non-RCRA wastes over 5 years. This increase would not exceed the Station's processing capabilities or permit conditions. Impacts would be less than significant.	Implementation of the Moderate Expansion Alternative would generate approximately 25% more RCRA and non-RCRA wastes over 5 years. This increase would not exceed the Station's processing capabilities or permit conditions. Impacts would be less than significant.

Resource	No Action Alternative	Limited Expansion Alternative	Moderate Expansion Alternative
Traffic and Circulation	<i>Vehicular traffic would remain at current levels. Impacts would remain less than significant.</i>	<i>Implementation of the Limited Expansion Alternative would generate a minor vehicular traffic increase (84 vehicles annually) associated with GTT activities. Impacts would be less than significant.</i>	<i>Implementation of the Moderate Expansion Alternative would generate a minor vehicular traffic increase (140 vehicles annually) associated with GTT activities. Impacts would be less than significant.</i>

ES.7.3 Energy Requirements and Conservation Potential of the Proposed Action and Alternatives

Direct energy requirements of the proposed action are limited to those necessary to operate established facilities, vehicles, and equipment. No superfluous use of energy related to the proposed action has been identified, and proposed energy uses have been minimized to the maximum extent possible without compromising the integrity of the testing, training, and facility management activities. Therefore, no additional conservation measures related to direct energy consumption by the proposed action are identified.

ES.7.4 Relationship Between Short-Term Uses and Long-Term Productivity

Implementation of the proposed action would result in increased air emissions, noise, aircraft and vehicle traffic, and generation of hazardous wastes. These impacts would be positively offset by the enhanced long-term productivity of NAWS to successfully meet its long-term goal of accommodating current and future military readiness requirements, and land management stewardship responsibilities.

ES.7.5 Unavoidable Adverse Effects

With the exception of an adverse but less than significant impact associated with projected noise levels affecting a 3-acre (1.2-hectare) area zoned for residential use (see Table ES-2), all potentially adverse impacts of the proposed action would be mitigable to a less than significant level by the implementation of procedures described in this document.